

REMARKS

Claims 1-22 are all the claims pending in the application. Claim 13 has been withdrawn from consideration.

I. Response to Obviousness-Type Double Patenting Rejections

Claims 1-12 and 14-22 are rejected on the ground of non-statutory obviousness-type double patenting as allegedly being unpatentable over “the claims” of U. S. Patent No. 6,767,613 and U. S. Patent No. 6,773,789. The Examiner states that the conflicting claims are not patentably distinct from each other because the patents describe a magnetic recording medium with similar features and compositions as the ‘522 application.

Applicants respectfully traverse the obviousness-type double patenting rejections and submit that the presently claimed subject matter is not an obvious variant of the subject matter of the claims of the cited patents.

The Examiner states that the conflicting claims are not patentably distinct because “the patents” disclose a magnetic recording medium with similar features and compositions as the present application. However, the proper inquiry for an obviousness-type double patenting rejection is whether the claimed subject matter of the present application is an obvious variation of an invention claimed in another commonly owned application, based upon what is recited in the claim and not what is disclosed in the specification. *See* MPEP 804(II)(B)(1). By stating that “the patents” disclose a magnetic recording medium with similar features and compositions as the present application and by not referring to any specific claim in the patent, the Examiner appears to improperly rely on the disclosure in the patent specifications.

(1) The '613 Patent

In the case of US '613 the claims of the '613 patent do not mention, teach or suggest a radiation-cured layer much less the molecular weight of the radiation curing compound comprising the radiation-cured layer is 1,000 or less as recited in the present claims. Thus, the present invention is not an obvious variant of the claims of the '613 patent.

(2) The '789 Patent

The claims of the '789 patent recite a radiation-cured layer but do not mention, teach or suggest a radiation-cured layer formed by curing a layer containing a radiation curing compound, wherein the molecular weight of the radiation curing compound comprising the radiation-cured layer is 1,000 or less as recited in the present claims. Thus, the present invention is not an obvious variant of the claims of the '789 patent.

Accordingly, Applicants respectfully request withdrawal of the rejections.

II. Response to Claim Rejections under 35 U.S.C. § 103

Claims 1-12 and 14-22 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Seki et al (US 5,712,028) and further in view of Inaba et al (US 6,074,724).

Applicants traverse the rejection and submit that the Examiner has not made a *prima facie* showing of obviousness. Specifically, the cited references do not teach or suggest the present invention as a whole, whether taken alone or in combination.

Seki et al (Seki hereinafter) teach a magnetic recording medium having a 2-layer arrangement over a flexible substrate. Please note claim 1 and a sectional view shown in Fig. 1 and description of the drawings at column 2, line 59 - column 3, line 7 of Seki. As shown in Fig.

1 the magnetic recording medium 1 includes a flexible substrate 10, an undercoating layer 20 formed on the flexible substrate 10, and a magnetic layer 30 formed on the undercoating layer 20.

On the other hand the present invention is directed to a magnetic recording medium having a 3-layer arrangement over a flexible substrate. Please note claim 1 and the description bridging page 3, line 25 to page 4, line 7 and Examples 1-12 on page 26, line 7 to page 31, the end of Table 3 in the present specification. The magnetic recording medium of the present invention has an additional radiation-cured layer between a non-magnetic support and a lower layer or a undercoating layer. This radiation-cured layer works to smooth the surface of the projections of the support and decreases the magnetic layer micro projections, as explained on page 4, lines 8-22 of the present specification. Seki does not mention, teach or suggest such a radiation-cured layer.

The lower layer of the magnetic recording medium of the present invention corresponds to the undercoating layer of Seki, since both layers comprise a non-magnetic powder dispersed in a binder (claim 1 of Seki and claim 1 of this invention).

The Examiner refers to the disclosure of Seki at column 12, lines 10-69. This passage relates to "the binder resins which are appropriately used in the magnetic layer 30 and the undercoating layer 20" (column 7, lines 55-61) and therefore does not relate to the radiation curing compound of the radiation-cured layer of the present invention.

The Examiner also refers to column 13, lines 29-43 of Seki, and urges that this portion of the disclosure relates to a glass transition temperature of a binder for a magnetic layer. However column 13, lines 29-43 of Seki describes a solvent for use to prepare the magnetic coating material (see column 13, line 6).

The Examiner cited Inaba et al (Inaba hereinafter) to remedy the deficiencies of Seki. However, it should be noted that Inaba neither teaches nor suggests the smoothing layer located between a substrate and an undercoating layer (a lower layer). Further, Inaba does not remedy the deficiency of Seki et al regarding the molecular weight of the radiation curing compound since, as the previous Examiner conceded in the Action dated April 29, 2005, Inaba et al fails to teach details of the adhesive layer relied on as corresponding to the claim radiation-cured layer, including at least the presently claimed low molecular weight radiation curing compounds.

Thus, even if Seki et al and Inaba et al were combined, the present invention would have been achieved because neither reference teaches or suggests the element of a radiation-cured layer formed by curing a layer containing a radiation curing compound by exposure to radiation, wherein the molecular weight of the radiation curing compound is 1,000 or less.

For at least these reasons the present invention is not rendered obvious by the cited references.

Moreover, the present invention provides unexpectedly superior effects. Table 2 of the present specification shows the advantages of the radiation-cured layer. Examples 1-12 employ the radiation-cured layer which bury the micro projections of the substrate and decrease the number of magnetic layer micro projections and show excellent repetitive transport characteristics. Comparative Example 1 has the same components as Example 1 except that the radiation-cured layer is not present. The data in Table 2 at page 30 of the specification shows that the medium of Comparative Example 1 results in a large number of magnetic layer micro projections and poor repetitive transport characteristics. Seki or Inaba corresponds to Comparative Example 1 and the data in Table 2 shows that the magnetic recording medium of

the present invention shows unexpected superior results over the prior art with respect to repetitive transport characteristics as well as good electromagnetic conversion characteristics and small increase in drop-outs (D.O.).

Thus, for this additional reason, the present invention is patentable over the cited references.

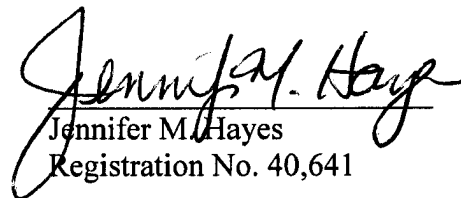
Accordingly, Applicants respectfully request withdrawal of the §103 rejection.

III. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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